



Office Location:  
Bismarck, Fargo

**NORTH DAKOTA MANUFACTURING EXTENSION PARTNERSHIP (NORTH DAKOTA MEP)** is a non-profit organization sponsored by NIST MEP, the North Dakota Department of Commerce and manufacturers in North Dakota. Contact: Randy Schwartz, 400 East Broadway Avenue, Suite 616, Bismarck, ND 58502, (701) 328-5314, Fax: (701) 328-7254, Email: randys@ndmep.com, Website: <http://www.ndmep.com>

## THE MANUFACTURING EXTENSION PARTNERSHIP IN NORTH DAKOTA

Manufacturing Extension Partnership (MEP) is a nationwide system of services and support for smaller manufacturers to become more globally competitive. At the heart of the system is a network of affiliated, locally-based manufacturing extension centers. Each center, like North Dakota MEP, is a partnership, typically involving federal, state, and local governments; industry; educational institutions; and other sources of expertise, information and funding support.

### COMPANY CLIPS

#### Funshine Express Gets On Track To Improved Efficiency

Funshine Express, Inc. develops and manufactures innovative preschool curriculum kits for preschool teachers and childcare providers. This Dickinson business provides a wide range of learning materials for early childhood professionals. From its beginning as a two-employee home-based business with orders of approximately 50 kits per month, by 2002 Funshine Express had 14 full-time staff and several part-time staff. In 2000, Funshine Express purchased a 4,000 square-foot facility to house its growing operation. Gross sales for 2001 were \$850,000.

Rapid growth provided many challenges in terms of staffing, facilities, and equipment. Within one year of relocating to the new building Funshine Express began to run out of room. Raw materials, work-in-process, excess inventory, and inefficient production processes took up considerable space within the facility. Addressing the ergonomic and safety needs of the growing staff proved challenging, and intensive labor costs involved in producing the kits started to become prohibitively high. Funshine Express contacted the Southwest North Dakota Manufacturer's Roundtable, which recommended the services of the North Dakota Manufacturing Extension Partnership (ND MEP).

ND MEP visited the plant to conduct an assessment, watching production operations and listening to the employees' and owner's issues. ND MEP helped the Funshine team evaluate its production processes, formulate goals, and implement changes. With ND MEP's help, Funshine changed the entire flow of production. The company added shelving for more efficient storage, worked out a production schedule to eliminate overproduction, and reduced excess inventory by lowering batch sizes. ND MEP helped balance the production line, and spent time cleaning and organizing the assembly floor to increase storage space. By implementing point-of-use storage, Funshine Express eliminated wasted steps and unnecessary movement. Finally, ND MEP added step-by-step visuals along the line to assist the assembly staff.

*Continued*

### STATE STATS

DATA\* COVERS JANUARY TO DECEMBER 2001

Number of projects completed with firms  
**192**

Number of firms served  
**66**

Number of firms served for  
the first time  
**39**

Federal cost share for current  
operating year  
**\$200,600**

State/other cost share for current  
operating year  
**\$401,200**

*\*Data as reported from center*



### **Baker Boy Tastes Sweet Success**

Baker Boy is a manufacturer of high quality bakery products serving the food service, bakery, and private label markets in the United States and Canada. The company produces over 650 products and employs 250 people. Established as a local bakery in the 1950s by Marvin Moos, the company expanded to include the manufacture of frozen dough products in 1978. From the original 3,000 square foot facility, the business now encompasses an 85,000 square foot technologically sophisticated production facility in Dickinson.

Baker Boy has responded to the increasing demand for its products through multiple expansions and significant employee growth over the last two years. Unfortunately, employees were still working long overtime hours on the baked goods line while the bake area equipment remained under-utilized. The company recognized the need to maximize its staff and improve its efficiency. In an effort to inject new ideas into the organization, Baker Boy took advantage of a number of training sessions on lean manufacturing sponsored by the North Dakota Manufacturing Extension Partnership (ND MEP).

ND MEP held the first session in November 2001 and offered two more sessions in 2002. Based on the lean concepts taught by ND MEP, key management staff at Baker Boy worked together with teams of employees to apply many concepts—such as 5S, an organizational lean practice—directly into the workplace. ND MEP helped the Baker Boy team with its lean implementation by conducting plant visits, self-administered assessments, and implementation assistance. Together, ND MEP and Baker Boy found ways to utilize every part of the facility and make it more efficient.

The first major change at Baker Boy was the elimination of mandatory overtime, accomplished by improving facility utilization and moving to a seven-day workweek. The next major change was the organization of the baked goods line area. Now it is a visual organization and materials are easy to find. Everything is clean and in place, and Baker Boy employees have more time to participate in the implementation of lean practices. Overall, Baker Boy improved efficiency from 71 percent to 93 percent, made better use of its equipment and facility, and improved employee morale by encouraging a sense of teamwork and participation.